1-7.   Canceled

8.   (Currently Amended) An image reject circuit apparatus comprising:

a first frequency downconversion circuit employing a first local oscillator for downconverting in-phase and quadrature signal components of a digitized communication signal to a first intermediate frequency;

sigma delta converters for generating an in phase digital bit stream and a quadrature phase digital bit stream;

a digital in-phase and quadrature phase second local oscillator;

mixing circuitry for mixing respective single serial digital bit stream in-phase signal and single serial digital bit stream quadrature phase signal through a set of logic gates to produce a digital representation of downconverted in-phase and quadrature components, the mixing circuitry comprising, for each significant bit:

first and second exclusive-OR gates coupled to receive as first input an in phase digital bit stream and as second inputs a high accuracy sine function bit stream and a high accuracy cosine function bit stream;

third and fourth exclusive-OR gates coupled to receive as first input a quadrature phase digital bit stream and as second inputs a high accuracy sine function bit stream;

first OR gate for logically adding the outputs of the first and second XOR gates for the in-phase channel;

first AND gate for logically multiplying the outputs of the first and second XOR gates for the in-phase channel;

second OR gate for logically adding the outputs of the third and fourth

XOR gates for the quadrature phase channel; and

second AND gate for logically multiplying the outputs of the third and

fourth XOR gates for the quadrature phase channel;

weighting resistances in series with the outputs of the logic gates for combining

the digital representation of the downconverted in-phase and quadrature components

according to a value in an in-phase signal and in a quadrature phase signal; and

reconstruction filters to recover in-phase and quadrature phase baseband signals

from said downconverted in-phase and quadrature components substantially free of

image artifacts.

9-10.   Canceled.